

## POSTER PRESENTATIONS

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# Falcipain 2 inhibitors and antiplasmodial compounds from a bio-guided fractionation of the fruits of *Sorindeia juglandifolia* A. Rich. (Anacardiaceae) growing in Cameroon

Fabrice F Boyom<sup>1\*</sup>, Eugénie K Madiesse<sup>1,2</sup>, Jean J Bankeu<sup>3</sup>, Valere P Tsouh<sup>1</sup>, Bruno N Lenta<sup>3</sup>, Wilfred F Mbacham<sup>2</sup>, Etienne Tsamo<sup>3</sup>, Paul HA Zollo<sup>1</sup>, Jiri Gut<sup>4</sup>, Philip J Rosenthal<sup>4</sup>

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## Background

Discovering new lead compounds with the potential to become usable drugs against malaria is a crucial step to ensuring a sustainable global pipeline for innovative products. We describe here the results of an antimalarial activity-driven fractionation of the fruits of *Sorindeia juglandifolia* growing in Cameroon.

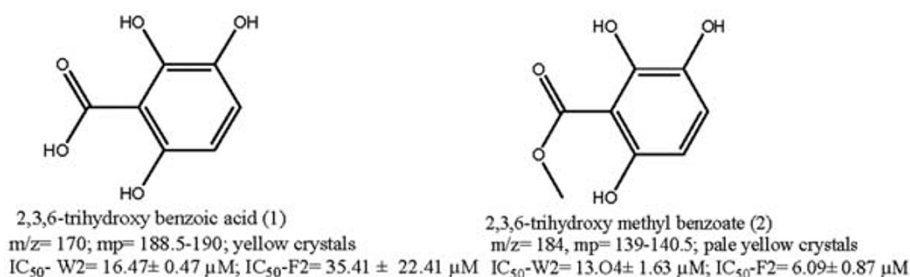
## Materials and methods

Fresh fruits were collected by an ethnobotanist in Yaoundé area in May 2009. The plant was dried at Room Temperature during 7 days, powdered and extracted using organic solvents. The extract was fractionated by flash chromatography over silica gel (70-230 mesh, Merck, 7 x 42 cm), eluting with gradients of hexane-ethyl acetate mixtures, and resulted in 35 fractions,

which were pooled on the basis of thin layer chromatography patterns. Resulting fractions were tested *in vitro* against the *Plasmodium falciparum* chloroquine-resistant strain W2, and the recombinant cysteine protease Falcipain 2 (F2) [1]. Two fractions showed the best potency and were selected for phytochemical investigation guided by biological activity.

## Results

The main end-compounds afforded through the phytochemical investigation were found to be known (Figure 1), 2,3,6-trihydroxy benzoic acid (1), and 2,3,6-trihydroxy methyl benzoate (2) that exhibited low micromolar inhibitory concentrations against *P. falciparum* W2 and Falcipain 2 respectively.



**Figure 1** Antimalarial compounds isolated from *Sorindeia juglandifolia*.

<sup>1</sup>Laboratory of Phytobiochemistry, Department of Biochemistry, Faculty of Science, University of Yaoundé 1, P.O., Box 812, Yaoundé, Cameroon  
Full list of author information is available at the end of the article

## Conclusion

The isolated compounds have not been previously investigated for antimalarial activity, and therefore suggesting further investigation.

## Author details

<sup>1</sup>Laboratory of Phytobiochemistry, Department of Biochemistry, Faculty of Science, University of Yaoundé 1, P.O., Box 812, Yaoundé, Cameroon.

<sup>2</sup>Laboratory for Public Health Biotechnology, Biotechnology Centre, University of Yaoundé 1, P.O. Box 8094, Yaoundé, Cameroon. <sup>3</sup>Laboratory of Natural Products, Department of Organic Chemistry, Faculty of Science, University of Yaoundé 1, P.O. Box 812, Yaoundé, Cameroon. <sup>4</sup>Division of Infectious Diseases, Department of Medicine, University of California; San Francisco, 94943 USA.

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